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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,726	11/28/2001	Yi-Tun Huang	HUAN3096/EM	8318
7590	02/16/2005		EXAMINER	TRUONG, LECHI
Eugene Mar BACON & THOMAS, PLLC Fourth Floor 625 Slaters Lane Alexandria, VA 22314-1176			ART UNIT	PAPER NUMBER
			2126	
			DATE MAILED: 02/16/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/994,726	YI-TUN	

Examiner	Art Unit	
LeChi Truong	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 October 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-8 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuhashi (US. Patent 6,535,293 B1) in view of Bailey (US. Patent 4,788,505).
3. As to claim 1, Mitsuhashi teaches the invention substantially as claimed including: a control interface card connected to the CPU of a host processor (col 11, ln 5-13 and ln 21-25), object position data (coordinate information of a plotting area of a print object generated as the print information, col 4, ln 30-33), a feedback position data (character-string print position, col 4, ln 32-25), data buffer adapted for registering/a registered object position data from said data buffer (col 4, ln 45-50/ col 6, ln 26-29/ col 13, ln 31-34), a position compare circuit adapted for fetching a registered object position data and the fetched object position data with a feedback position data(col 4, ln 30-36/ col 15, ln 50-55).

Mitsuhashi does not explicitly teach a triggering signal, comparing a next registered object position, an object shifting control, triggering signal when one of the position data is determined to match with one of the feedback position data. However, Bailey teaches triggering

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signal (trigger signal, col 1, ln 50-52), comparing a next registered object position, an object shifting control (col 4, ln 60-63, col 2, ln 15-20), an object shifting control (a cylinder count counter 5/a counter latch 7, col 2, ln 51-55), triggering signal when one of the position data is determined to match with one of the feedback position data (col 4, ln 45-54).

5. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mitsuhashi and Bailey because Bailey's a triggering signal, comparing a next registered object position, an object shifting control, triggering signal when one of the position data is determined to match with one of the feedback position data would provide more effective trigger signal used for troubleshooting, diagnosing and servicing of an internal combustion engines.

As to claim 3, Bailey teaches counting (counter, col 2, ln 14-17).

As to claim 5, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.

As to claim 7, it is an apparatus claim of claim 3; therefore, it is rejected for the same reason as claim 3 above.

7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuhashi (US. Patent 6,535,293 B1) in view of Bailey (US. Patent 4,788,505) as applied to claim 1 above and further view of Wess et al (US. Patent 6,198,544 B1).

8. **As to claim 2,** Matsuhashi and Bailey do not explicit teach a motion control interface card. However, Wess teaches a motion control interface card (motion image card, col 1, ln 30-47).

9. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Matsuhashi, Bailey and Wess because Wess's motion image card would provide an easy, hinge quality, and inexpensive manner for consumer from their home video tapes.

As to claim 6, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

10. **Claims 4 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuhashi (US. Patent 6,535,293 B1) in view of Bailey (US. Patent 4,788,505) as applied to claim 1 above and further view of Johnson (US. Patent 5,764,896).

11. **As to claim 4,** Matsuhashi and Bailey do not teach a bus controller, a bus arbitrator connected to say bus controller and adapted for providing an interrupt signal to the CPU. However, Johnson teaches a bus controller, a bus arbitrator connected to say bus controller and adapted for providing an interrupt signal to the CPU (bus controller 208, the bus 206, col 5, ln 25-33, Fig. 2/ notification of the host processor 200 is handled by asserting an interrupt signal on the bus 206, col 7, ln 8-13/ ln 45-49).

12. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Matsuhashi, Bailey and Johnson because Johnson's a bus

controller, a bus arbitrator connected to say bus controller and adapted for providing an interrupt signal to the CPU would provide the advance notification of data from the network.

As to claim 8, it is an apparatus claim of claim 4; therefore, it is rejected for the same reason as claim 4 above.

Response to the argument

4. Applicant's arguments filed 10/14/ 2004 have been considered but are moot in view of the new ground(s) of rejection. Applicant amended the claims. Mitsuhashi and Bailey's references meet the amended claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

February 11, 2005


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